

Work Order ID 153285

Tuesday, November 15, 2016 1:39:46 PM

153285

Page 1

Item ID: D4777-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Rod End Bearing
Start Date: 11/18/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 12/2/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: **DAS 21** Date: **NOV 15 2016** Tooling: Date: Run Start ***NR1***
QC: **9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4777	A								

100 ***100*** PURCHASING 0.00 **DAS 13 9-89**
Purchasing **10** NOV 16 2016
Purchasing Memo 0.00
Issue P/O: **34337**
Purchase Part Number: 59915K274 Supplier: Mc Master Carr or CTG
Certificate of conformity is required

110 ***110*** Receive & Inspect for Damage & Mat'l Certs 0.00 **DAS 26 9-89**
Packaging **10x** NOV 21 2016
Packaging Memo 0.03
Ensure certificate of conformity is attached

120 ***120*** QC6- Inspect dimensions to drawing 0.00 **DAS 38 9-89**
QC **10** NOV 21 2016
Quality Control Memo 0.00

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

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130

Identify as per dwg & Stock Location: *Stlas*

0.00

130

Packaging

Memo

0.02

Packaging

NOV 22 2016

DAS
6
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.17

Quality Control

*16/11/22*DAS
21
9-89

NOV 22 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
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Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Picklist Print

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Work Order ID: 153285

153285

Parent Item: D4777-1

D4777-1

Parent Item Name: Rod End Bearing

Start Date: 11/18/2016

Required Date: 12/2/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 12.10.03 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
59915K274		Purchased	No			110	Each	0.0000	1	10			
59915K274									**				
Rod End Bearing													

80/6-11-23

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

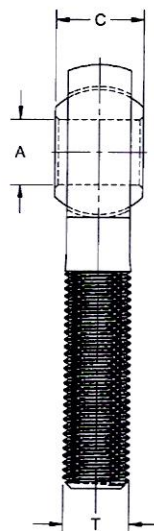


QA Closed: _____ Date: _____

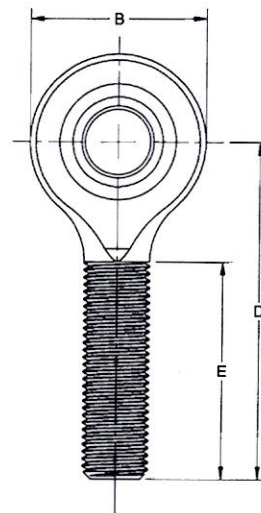
Work Order update only ☐

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Misidentified ☐	Past Due ☐																																																														

SPECIFICATION CONTROL DRAWING



ROD END BEARING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153285 MJS
10-11-15

DART P/N	HOUSING MATERIAL	A	B	C	D	E	T (THREAD SIZE)	SUGGESTED SUPPLIER	SUGGESTED SUPPLIER P/N
D4777-1	STAINLESS STEEL	Ø0.38	1.00	0.500	1.94	1.25	3/8-24 (RIGHT HAND)	MC MASTER CARR	59915K274

RELEASED
2013-08-14
JWP

A	NEW ISSUE	AJS	13.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.08.08		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. D4777
REV. A
SHEET 1 OF 1
TITLE
ROD END BEARING
SCALE
NTS

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QA Closed: _____ Date: _____

Work Order update only

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev I



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO34337

Purchase Order Date 11/16/2016
PO Print Date 11/16/2016

Page Number 1 of 6

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

NOV 16 2016

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	91249A146 AS PER DWG D4898 REV. A B153289	Screw, Stainless Steel	11/18/2016 Yes 11/18/2016		100.00 Each	\$0.05	\$5.06
Line Total:							\$5.06
2	8672K31 AS PER DWG D4287 REV. A B153288	UHMW U-Channel	11/18/2016 Yes 11/18/2016		24.00 f	\$3.74	\$89.76
Line Total:							\$89.76
3	59915K274 AS PER DWG D4777 REV. A B153285	Rod End Bearing	11/18/2016 Yes 11/18/2016		10.00 Each	\$19.05	\$190.50

Note:

11/16/2016

NOV 21 2016



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO34337

Order Placed By
Chantal Lavoie

McMaster-Carr Number
3452355-03

Page 1 of 1

11/16/2016

Line	Product	Ordered	Shipped
1	91249A146 Black-Oxide Finish Pan Head Phillips Machine Screw 18-8 Stainless Steel, 6-32 Thread, 3/8" Length, Packs of 100	1 Pack	1 ✓
3	59915K274 PTFE-Lined Stainless Steel Ball Joint Rod End 3/8"-24 RH Male Shank 3/8" Ball ID, 1-1/4" Long Thread	10 Each	10
4	53485K22 Push-on Brass Barbed Hose Fitting 1/4" ID, 7/16"-20 UNF 37 & 45 Degree Female Flared End, Packs of 5	1 Pack	1
5	91525A120 316 Stainless Steel Washer Oversized, 1/4" Screw Size, 0.281" ID, 1" OD, Packs of 25	2 Packs	2
6	92311A599 18-8 Stainless Steel Cup Point Set Screw 5/16"-24 Thread, 5/8" Long, Packs of 50	1 Pack	1
7	6605K56 Hook and Loop Cable Ties 24" Overall Length, Meets UL 94V2, Packs of 5	2 Packs	2
8	54895T44 Hooks for Protective Curtains, Packs of 10	3 Packs	3
10	5547T5 Chemical Resistant PVC/Polyurethane Work Boot Safety Toe, 15" High, Black, Steel Shank, Men's Size 12	1 Pair	1
11	24215T61 Light Duty Caster with Hood 2" Nylon Wheels, 3/8" x 1" Friction Stem	10 Each	10
12	7510A653 Plastic Syringe with Luer Lock Tip, 0.34 oz. Capacity, Packs of 10, Gary	10 Packs	10
13	6641A41 Loctite Gasket Maker #598, 2.36 oz. Tube	10 Each	10

Shipped separately from our Chicago warehouse on 11/16

9	8841A21 Multi-Diameter Step Drili Bit High-Speed Steel, 13 Sizes, 1/8"-1/2", 1/4" Shank Diameter, 1/8" Maximum Thickness	4 Each	4
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